

## PATENT ABSTRACTS OF JAPAN

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(71)Applicant : IWASAKI ELECTRIC CO LTD

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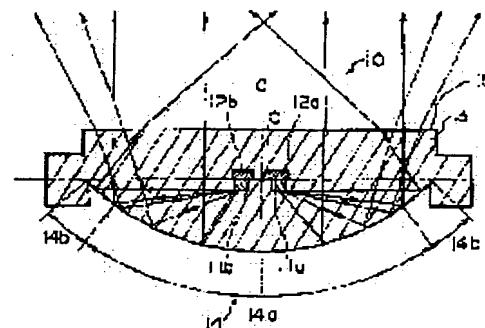
(72)Inventor : SUEHIRO YOSHINOBU  
SATO TAKASHI

## (54) REFLECTION LIGHT EMITTING DIODE

## (57)Abstract:

PURPOSE: To enable prevention of reduction in external radiation efficiency even when a radiation surface is formed at a higher position away from a reflection surface.

CONSTITUTION: A reflection light emitting diode has a light emitting device, a concave reflection surface 14 provided on a light emitting side of the light emitting device, a radiation surface 15 provided on the back side of the light emitting device, and a light transmitting material 13 charged between the concave reflection surface 14 and the radiation surface 15. In this reflective light emitting diode, the concave reflection surface 14 has a first reflection surface 14a formed in a central portion thereof for reflecting a light emitted in a horizontal direction by the light emitting device over a wide range including a direction substantially parallel to the center axis. In addition, the concave reflection surface 14 has second reflection surfaces 14b, 14b formed on both ends in the horizontal direction for reflecting the light emitted in the horizontal direction by the light emitting device into a direction substantially parallel to the center axis and a direction inner from the center axis.



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